IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A transmitting device for transmitting copyright protected contents data to a receiving device through radio communications, transmitting device comprising:

a first authentication unit configured to carry out a first authentication with the receiving device, for judging whether the receiving device is a device that is allowed to communicate with the transmitting device or not, on a radio link layer of the radio communications;

a first key exchange unit configured to generate a first encryption key and share the first encryption key with the receiving device when the first authentication with the receiving device by the first authentication unit is success;

a second authentication unit configured to carry out a second authentication with the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key with the receiving device when the second authentication with the receiving device by the second authentication unit is success; and

a communication unit configured to transmit the contents data to the receiving device through an encrypted communication path which is encrypted by using the second encryption key and provided on the radio link layer.

Claim 2 (Original): The transmitting device of claim 1, wherein when the second authentication or sharing of the second encryption key is failure for a reason that the

encrypted radio communication on the radio link layer is missing, one of the second authentication unit and the second key exchange unit notifies the failure and the reason to the receiving device.

Claim 3 (Original): The transmitting device of claim 1, further comprising a storage unit configured to store the contents data.

Claim 4 (Original): The transmitting device of claim 1, wherein the first authentication by the first authentication unit is success when a PIN code entered at the transmitting device and a PIN code notified from the receiving device are in a prescribed relationship.

Claim 5 (Original): The transmitting device of claim 4, wherein each PIN code contains at least one of a varying code information, a prescribed code information, a body information acquired from a body of a user, and an attribute information regarding attributes of the user.

Claim 6 (Original): A transmitting device for transmitting copyright protected contents data to a receiving device through radio communications, transmitting device comprising:

a first authentication unit configured to carry out a first authentication with the receiving device, for judging whether the receiving device is a device that is allowed to communicate with the transmitting device or not, on a radio link layer of the radio communications;

a first key exchange unit configured to generate a first encryption key and share the first encryption key with the receiving device when the first authentication with the receiving device by the first authentication unit is success;

a second authentication unit configured to carry out a second authentication with the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key with the receiving device when the second authentication with the receiving device by the second authentication unit is success; and

a communication unit configured to set up an encrypted communication path which is encrypted by using the second encryption key on the encrypted radio communication which is encrypted by using the first encryption key, and transmit the contents data to the receiving device through the encrypted communication path.

Claim 7 (Original): The transmitting device of claim 6, wherein when the second authentication or sharing of the second encryption key is failure for a reason that the encrypted radio communication on the radio link layer is missing, one of the second authentication unit and the second key exchange unit notifies the failure and the reason to the receiving device.

Claim 8 (Original): The transmitting device of claim 6, further comprising a storage unit configured to store the contents data.

Claim 9 (Original): The transmitting device of claim 6, wherein the first authentication by the first authentication unit is success when a PIN code entered at the

transmitting device and a PIN code notified from the receiving device are in a prescribed relationship.

Claim 10 (Original): The transmitting device of claim 9, wherein each PIN code contains at least one of a varying code information, a prescribed code information, a body information acquired from a body of a user, and an attribute information regarding attributes of the user.

Claim 11 (Original): A receiving device for receiving copyright protected contents data transmitted from a transmitting device through radio communications, the receiving device comprising:

a first authentication unit configured to carry out a first authentication with the transmitting device, for enabling the receiving device to operate as a device that is allowed to communicate with the transmitting device, on a radio link layer of the radio communications;

a first key exchange unit configured to generate a first encryption key and share the first encryption key with the transmitting device when the first authentication with the transmitting device by the first authentication unit is success;

a second authentication unit configured to carry out a second authentication with the transmitting device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key with the transmitting device when the second authentication with the transmitting device by the second authentication unit is success; and

a communication unit configured to receive the contents data transmitted from the transmitting device through an encrypted communication path which is encrypted by using the second encryption key and provided on the radio link layer.

Claim 12 (Original): The receiving device of claim 11, further comprising a reproduction unit configured to reproduce the contents data.

Claim 13 (Original): The receiving device of claim 11, wherein the first authentication by the first authentication unit is success when a PIN code entered at the receiving device and a PIN code notified from the transmitting device are in a prescribed relationship.

Claim 14 (Original): The receiving device of claim 13, wherein each PIN code contains at least one of a varying code information, a prescribed code information, a body information acquired from a body of a user, and an attribute information regarding attributes of the user.

Claim 15 (Original): A receiving device for receiving copyright protected contents data transmitted from a transmitting device through radio communications, the receiving device comprising:

a first authentication unit configured to carry out a first authentication with the transmitting device, for enabling the receiving device to operate as a device that is allowed to communicate with the transmitting device, on a radio link layer of the radio communications;

a first key exchange unit configured to generate a first encryption key and share the first encryption key with the transmitting device when the first authentication with the transmitting device by the first authentication unit is success;

a second authentication unit configured to carry out a second authentication with the transmitting device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key with the transmitting device when the second authentication with the transmitting device by the second authentication unit is success; and

a communication unit configured to set up an encrypted communication path which is encrypted by using the second encryption key on the encrypted radio communication which is encrypted by using the first encryption key, and receive the contents data transmitted from the transmitting device through the encrypted communication path.

Claim 16 (Original): The receiving device of claim 15, further comprising a reproduction unit configured to reproduce the contents data.

Claim 17 (Original): The receiving device of claim 15, wherein the first authentication by the first authentication unit is success when a PIN code entered at the receiving device and a PIN code notified from the transmitting device are in a prescribed relationship.

Claim 18 (Original): The receiving device of claim 17, wherein each PIN code contains at least one of a varying code information, a prescribed code information, a body

information acquired from a body of a user, and an attribute information regarding attributes of the user.

Claim 19 (Original): A radio communication system, comprising a transmitting device for transmitting copyright protected contents data through radio communications, and a receiving device for receiving the contents data transmitted from the transmitting device, each one of the transmitting device and the receiving device having:

a first authentication unit configured to carry out a first authentication between the transmitting device and the receiving device, for judging whether the transmitting device and the receiving device are devices that are allowed to communicate with the transmitting device or not, on a radio link layer of the radio communications;

a first key exchange unit configured to generate a first encryption key and share the first encryption key between the transmitting device and the receiving device when the first authentication between the transmitting device and the receiving device by the first authentication unit is success;

a second authentication unit configured to carry out a second authentication between the transmitting device and the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key between the transmitting device and the receiving device when the second authentication between the transmitting device and the receiving device by the second authentication unit is success; and

a communication unit configured to transfer the contents data from the transmitting device to the receiving device through an encrypted communication path which is encrypted by using the second encryption key and provided on the radio link layer.

Claim 20 (Original): A radio communication system, comprising a transmitting device for transmitting copyright protected contents data through radio communications, and a receiving device for receiving the contents data transmitted from the transmitting device, each one of the transmitting device and the receiving device having:

a first authentication unit configured to carry out a first authentication between the transmitting device and the receiving device, for judging whether the transmitting device and the receiving device are devices that are allowed to communicate with the transmitting device or not, on a radio link layer of the radio communications;

a first key exchange unit configured to generate a first encryption key and share the first encryption key between the transmitting device and the receiving device when the first authentication between the transmitting device and the receiving device by the first authentication unit is success;

a second authentication unit configured to carry out a second authentication between the transmitting device and the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key between the transmitting device and the receiving device when the second authentication between the transmitting device and the receiving device by the second authentication unit is success; and

a communication unit configured to set up an encrypted communication path which is encrypted by using the second encryption key on the encrypted radio communication which is encrypted by using the first encryption key, and transfer the contents data from the transmitting device to the receiving device through the encrypted communication path.

Claim 21 (Original): A contents data transfer method in a radio communication system comprising a transmitting device for transmitting copyright protected contents data through radio communications and a receiving device for receiving the contents data transmitted from the transmitting device, the contents data transfer method comprising:

carrying out a first authentication between the transmitting device and the receiving device, for judging whether the transmitting device and the receiving device are devices that are allowed to communicate with the transmitting device or not, on a radio link layer of the radio communications;

generating a first encryption key and sharing the first encryption key between the transmitting device and the receiving device when the first authentication between the transmitting device and the receiving device is success;

carrying out a second authentication between the transmitting device and the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

generating a second encryption key and sharing the second encryption key between the transmitting device and the receiving device when the second authentication between the transmitting device and the receiving device is success; and

transferring the contents data from the transmitting device to the receiving device through an encrypted communication path which is encrypted by using the second encryption key and provided on the radio link layer.

Claim 22 (Original): A contents data transfer method in a radio communication system comprising a transmitting device for transmitting copyright protected contents data through radio communications and a receiving device for receiving the contents data transmitted from the transmitting device, the contents data transfer method comprising:

carrying out a first authentication between the transmitting device and the receiving device, for judging whether the transmitting device and the receiving device are devices that are allowed to communicate with the transmitting device or not, on a radio link layer of the radio communications;

generating a first encryption key and sharing the first encryption key between the transmitting device and the receiving device when the first authentication between the transmitting device and the receiving device is success;

carrying out a second authentication between the transmitting device and the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

generating a second encryption key and sharing the second encryption key between the transmitting device and the receiving device when the second authentication between the transmitting device and the receiving device is success; and

setting up an encrypted communication path which is encrypted by using the second encryption key on the encrypted radio communication which is encrypted by using the first encryption key, and transferring the contents data from the transmitting device to the receiving device through the encrypted communication path.

Claim 23 (New): A transmitting device for transmitting copyright protected contents data to a receiving device through radio communications, the transmitting device comprising:

a first key exchange unit configured to generate a first encryption key and share the first encryption key with the receiving device;

an authentication unit configured to carry out an authentication with the receiving device, for protecting copyright of the contents data to be transmitted, through an encrypted radio communication using the first encryption key;

a second key exchange unit configured to generate a second encryption key and share the second encryption key with the receiving device when the authentication with the receiving device by the authentication unit is success,

wherein

an encrypted communication path which is encrypted by using the second encryption key is set up on the encrypted radio communication which is encrypted by using the first encryption key, and

the contents data are transmitted to the receiving device through the encrypted communication path.

Claim 24 (New): A receiving device for receiving copyright protected contents data transmitted from a transmitting device through radio communications, the receiving device comprising:

a first key exchange unit configured to generate a first encryption key and share the first encryption key with the transmitting device;

an authentication unit configured to carry out an authentication with the transmitting device, for protecting copyright of the contents data to be received, through an encrypted radio communication using the first encryption key; and

a second key exchange unit configured to generate a second encryption key and share the second encryption key with the transmission device when the authentication with the transmitting device by the authentication unit is success,

wherein

an encrypted communication path which is encrypted by using the second encryption key is set up on the encrypted radio communication which is encrypted by using the first encryption key, and

the contents data transmitted from the transmitting device are received through the encrypted communication path.